

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Original) A method of directing a computer network for booting using an
2 embedded operating system (OS) based computer, the method comprising:
3 listening with an embedded OS based computer to PXE requests from a plurality
4 of PXE enabled target servers of a computer network; and
5 providing from the embedded OS based computer to one of the plurality of PXE
6 enabled target servers a netboot program and address information of a boot server from
7 the embedded OS based computer responsive to a PXE request from one of the PXE
8 enabled target servers.
- 1 2. (Original) The method as in claim 1, wherein the computer network comprises a
2 plurality of subnetworks of PXE enabled target servers.
- 1 3. (Currently Amended) The method as in claim 2, wherein the embedded OS based
2 computer listens to one of the ~~subnetwork~~ subnetworks.
- 1 4. (Currently Amended) The method as in claim 3, wherein the embedded OS based
2 computer listens to one of the ~~subnetwork~~ subnetworks by wireless communication.
- 1 5. (Original) The method as in claim 1, wherein the embedded OS is Windows CE
2 operating system.
- 1 6. (Original) The method as in claim 1, wherein the plurality of PXE enabled target
2 servers are part of a subnetwork of the computer network.
- 1 7. (Original) The method as in claim 1, wherein the listening step is performed
2 through a TCP/IP stack.

1 8. (Original) The method as in claim 1, wherein the address information of the boot
2 server comprises an IP address.

1 9. (Currently Amended) The method as in claim 1, further comprising transferring a
2 boot image from the boot server responsive to the netboot program executing on the one of the
3 PXE enabled target ~~server~~ servers.

1 10. (Original) The method as in claim 9, wherein the boot image is provided through
2 a router.

1 11. (Original) The method as in claim 9, wherein the boot image is provided by
2 wireless communication.

1 12. (Original) The method as in claim 9, wherein the boot image comprises responses
2 to preboot execution environment queries.

1 13. (Original) The method as in claim 9, wherein the boot image further comprises a
2 script specific to the requesting target server.

1 14. (Original) The method as in claim 9, wherein the boot image comprises code to
2 install at least one operating system.

1 15. (Original) The method as in claim 9, wherein the boot image comprises
2 application software.

1 16. (Original) The method as in claim 9, wherein the netboot program is executed out
2 of a read-only memory.

1 17. (Original) The method as in claim 9, wherein the boot image is transferred using
2 a trivial file transfer protocol.

1 18. (Currently Amended) The method as in claim 9, wherein the one of the PXE
2 enabled ~~server~~ target servers is booted by executing the boot image.

1 19. (Currently Amended) The method as in claim 1, further comprising displaying
2 address information for the plurality of PXE enabled target servers.

1 20. (Currently Amended) The method as in claim 1, further comprising displaying a
2 plurality of boot images for the plurality of PXE enabled target servers.

1 21. (Currently Amended) The method as in claim 1, further comprising displaying
2 PXE requests for the plurality of PXE enabled target servers.

1 22. (Currently Amended) An embedded OS based computer for network booting
2 under ~~[[PXE]]~~ preboot execution environment (PXE) control, the computer comprising:
3 a network interface controller (NIC);
4 an embedded ~~[[OS]]~~ operating system (OS) to control the NIC;
5 a ~~microcontroller~~ processor coupled to the NIC;
6 a ~~microcontroller~~ processor executable ~~preboot execution environment~~ PXE
7 routing software, which is adapted to perform the ~~microcontroller~~ processor executable
8 steps of:

9 listening ~~with an embedded OS based computer~~ to PXE requests from a
10 plurality of PXE enabled target servers of a computer network; and

11 providing ~~from the embedded OS based computer~~ to one of the plurality of
12 PXE enabled target servers a netboot program and address information of a boot
13 server ~~from the embedded OS based computer responsive~~ separate from the
14 embedded OS based computer, in response to a PXE request from the one of the
15 PXE enabled target servers.

1 23. (Original) The embedded OS based computer as in claim 22, further comprising a
2 display coupled to the processor.

1 24. (Original) The embedded OS based computer as in claim 22, further comprising
2 an input device coupled to the processor.

1 25. (Original) The embedded OS based computer as in claim 22, further comprising a
2 memory coupled to the processor.

1 26. (Original) The embedded OS based computer as in claim 25, wherein the
2 memory further comprises:

3 a web browser;
4 PXE service applications;
5 a TFTP application;
6 a Net Boot Program (NBP); and
7 a boot image.

1 27. (Original) The embedded OS based computer as in claim 25, wherein the
2 embedded OS based computer is configured through the web browser.

1 28. (Original) The embedded OS based computer as in claim 25, wherein the
2 embedded OS based computer is configured directly.

1 29. – 38. (Cancelled)

1 39. (New) The method of claim 1, wherein providing the netboot program from the
2 embedded OS based computer comprises providing the netboot program from the embedded OS
3 based computer that is separate from the boot server.

1 40. (New) The method of claim 39, wherein providing the netboot program to the
2 one of the PXE enabled target servers comprises providing the netboot program that when
3 executed causes the one of the PXE enabled target servers to issue a request to the boot server for
4 a boot image to download to the one of the PXE enabled target servers.

1 41. (New) The method of claim 40, further comprising:
2 receiving, by the embedded OS based computer, the request to the boot server;
3 and
4 in response to the request, send, by the embedded OS based computer, a Trivial
5 File Transfer Protocol (TFTP) request to the boot server for the boot image.

1 42. (New) The embedded OS based computer of claim 22, wherein the netboot
2 program when executed causes the one of the PXE enabled target servers to issue a request to the
3 boot server for a boot image.

1 43. (New) The embedded OS based computer of claim 42, wherein the boot image
2 comprises a script that includes code to install an operating system on the one of the PXE
3 enabled target servers.

1 44. (New) The embedded OS based computer of claim 22, comprising a handheld
2 computer.

1 45. (New) The embedded OS based computer of claim 22, wherein the embedded OS
2 comprises a Windows CE OS.

1 46. (New) The embedded OS based computer of claim 22, further comprising a
2 display to display address information for the plurality of PXE enabled target servers.

1 47. (New) An article comprising a storage containing software that when executed
2 causes a first computer to:
3 receive a request from a target server for remote booting of the target server; and
4 in response to the request, send a program and address information of a boot
5 server to the target server, wherein the boot server is separate from the first computer,
6 wherein the program when executed causes the target server to issue a boot server
7 request to the boot server for a boot image to download to the target server.

1 48. (New) The article of claim 47, wherein the software when executed causes the
2 first computer to further:
3 receive the boot server request; and
4 in response to the boot server request, issue a Trivial File Transfer Protocol
5 (TFTP) request to the boot server for the boot image.

1 49. (New) The article of claim 47, wherein the first computer comprises an
2 embedded operating system (OS) based computer containing an embedded OS.

1 50. (New) The article of claim 49, wherein the first computer comprises a handheld
2 computer.

1 51. (New) The article of claim 47, wherein the first computer receives the request
2 from the target server by wireless communications.

1 52. (New) The article of claim 47, wherein the received request from the target
2 server comprises a preboot execution environment (PXE) request, the target server being a PXE
3 enabled target server.

1 53. (New) A computer comprising:
2 a processor;
3 an embedded operating system (OS) executable on the processor;
4 software executable on the processor to:
5 receive a request from a target server; and
6 in response to the request, send information to the target server to direct
7 the target server to a boot server separate from the computer for downloading a
8 boot image from the boot server to the target server for remote booting of the
9 target server,
10 wherein the computer is a reduced-capability computer having less
11 capability than a server computer.

1 54. (New) The computer of claim 53, wherein the embedded OS comprises a
2 Windows CE OS.

1 55. (New) The computer of claim 53, further comprising a wireless interface to
2 receive the request wirelessly.

1 56. (New) The computer of claim 53, wherein the received request comprises a
2 preboot execution environment (PXE) request.

1 57. (New) The computer of claim 53, further comprising a display to display address
2 information for plural target servers, and to list boot images for the plural target servers,
3 the software executable on the processor to:
4 listen to requests from the plural target servers for remote booting of the
5 target servers.

1 58. (New) The computer of claim 53, wherein the information sent to the target
2 server comprises a netboot program and an address of the boot server.